

Name: _____

at1124exam: Radicals and Squares (v820)

Question 1

Simplify the radical expressions.

$$\sqrt{44}$$

$$\sqrt{18}$$

$$\sqrt{63}$$

Question 2

Find all solutions to the equation below:

$$10 \left((x - 10)^2 - 8 \right) = 80$$

Question 3

By completing the square, find both solutions to the given equation. *You must show work for full credit!*

$$x^2 + 10x = 56$$

Question 4

A quadratic polynomial function is shown below in standard form.

$$y = 3x^2 + 24x + 39$$

Express the function in **vertex form** and identify the **location** of the vertex.